

THE UNITED STAYLES OF AVIERIOA

TO ALL TO WHOM THESE: PRESENTS SHALL COME:

Monsanto Jechnology TIG

THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT. THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE PHERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT (S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE CHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR RITING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE SURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'I285291'

In Cestimonn Marrest, I have hereunto set my hand and caused the seal of the Munt Marrety Protection Office to be affixed at the City of Washington, D.C. this twenty-fifth day of November, in the year two thousand and eight.

Attest:

Oe-3

Commissioner Plant Variety Protection Office Agricultural Marketing Service Secretary of my tro

ST-470 (02-10-2003) designed by the Plant Variety Protection Office using Word 2000.

U.S. DEPARTMENT OF AGRICULTURE The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE the Paperwork Reduction Act (PRA) of 1995. Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426). APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse) TEMPORARY DESIGNATION OR EXPERIMENTAL NAME 1. NAME OF OWNER 3. VARIETY NAME Monsanto Technology L.L.C. レレC 1285291 None 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 5. TELEPHONE (include area code) FOR OFFICIAL USE ONLY PVPO NUMBER (815) 758-9281 800 N. Lindbergh Blvd. Creve Coeur, MO 63167 6. FAX (include area code) (815) 758-3117 FILING DATE 7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF 9. DATE OF INCORPORATION 8. IF INCORPORATED, GIVE March 1, 2006 ORGANIZATION (corporation, partnership, association, etc.) STATE OF INCORPORATION August 27, 1999 Corporation Delaware 10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) : 4382.00 Timothy R. Kain Michael J. Roth 8350 Minnegan Road 800 N. Lindbergh Blvd. Waterman, IL 60556 Creve Coeur, MO 63167 10/29/08 U.S.A. U.S.A. 11. TELEPHONE (Include area code) 12. FAX (Include area code) 13. E-MAIL 14. CROP KIND (Common Name) (815) 758-9281 trkain@monsanto.com (815) 758-3117 Corn, Field 15. GENUS AND SPECIES NAME OF CROP 17. IS THE VARIETY A FIRST GENERATION 16. FAMILY NAME (Botanical) Zea mays Graminae ☐ YES X_{NO} 18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) 19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act) X_I NO (If "no", go to item 22) a. X Exhibit A. Origin and Breeding History of the Variety ☐ YES (If "yes", answer items 20 and 21 below) X Exhibit B. Statement of Distinctness \Box 20. DOES THE OWNER SPECIFY THAT SEED OF THIS YES □ NO VARIETY BE LIMITED AS TO NUMBER OF CLASSES? X Exhibit C. Objective Description of Variety ☐ Exhibit D. Additional Description of the Variety (Optional) IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED CERTIFIED X Exhibit E. Statement of the Basis of the Owner's Ownership 21 DOES THE OWNER SPECIFY THAT SEED OF THIS ☐ YES □ NO VARIETY RELIMITED AS TO NUMBER OF GENERATIONS? Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED g. X Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office) (If additional explanation is necessary, please use the space indicated on the reverse.) 22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. 23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? □ NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.) IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is (are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties. SIGNATURE OF OWNER SIGNATURE OF OWNER moth NAME (Please print or type) NAME (Please print or type) Timothy R. Kain DATE 2/27/06 CAPACITY OR TITLE CAPACITY OR TITLE DATE Patent Scientist

(See reverse for instructions and information collection burden statement)

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;

(3) evidence of uniformity and stability; and

- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease
- . 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Parent of a hybrid sold in the U.S. - April 2005

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

U.S. Patent Application No. 11/098,602 - filed April 4, 2005 (I285291)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

ST-470 (02-10-2003) designed by the Plant Variety Protection Office with Word 2000. Replaces former versions of ST-470

EXHIBIT A (revised)

Origin and Breeding History I285291

Corn Variety I285291 was selected for its YLD:MST (Yield to Moisture) ratio, improved root and stalk strength, improved grain quality, short plant stature, and general combining ability. Selections for ear uniformity and consistency were made under high plant populations which put significant selection pressure on the line to silk, shed pollen, and set seed under stressful conditions.

Summer 1999	The inbred line 01INL1 (a proprietary DEKALB Genetics Corporation inbred) was crossed to the inbred line 17INI20 (a proprietary DEKALB Genetics Corporation inbred) in the Monmouth, Illinois MIS0CP breeding nursery rows R16:C823 and R16:C819.
Winter 1999-2000	The S0 seed was grown and self-pollinated in Isabella, Puerto Rico nursery row 3172.
Summer 2000	S1 seed was grown and self-pollinated in Owatonna, Minnesota nursery rows F2:11321-11340. 390 S2 ears were selected.
Summer 2001	S2 ears were grown ear-to-row and self-pollinated in Owatonna, Minnesota Breeding Nursery YT1. Three ears were selected in nursery row YT1:21318.
Winter 2001-02	S3 ears were grown ear-to-row and self-pollinated in an Isabella, Puerto Rico Breeding Nursery. Three ears from nursery row SS2PR 000510 were selected.
Summer 2002	S4 ears were grown ear-to-row and self-pollinated in Owatonna, Minnesota Breeding Nursery YT2. Three ears from nursery row YT2 020850 were selected. Line was designated I285291
Winter 2002-03	S5 ears were grown ear-to-row and self-pollinated. 10 ears were selected from nursery row Ki3:30086.
Summer 2003	S6 ears were grown ear-to-row and self–pollinated in Owatonna, Minnesota Breeding Nursery PCMLI. Final selection was completed in nursery rows PCMLI 60718 to 60724. This selection consisted of bulking S7 ears.

Statement of Stability and Uniformity

Corn variety I285291 was coded in 2002 with final selection made in 2003. This inbred has been reproduced by self pollination for three generations and judged to be stable. Corn variety I285291 is uniform for all traits observed.

Statement of Variants

Corn variety I285291 shows no variants other than what would normally be expected due to environment or that would occur for almost any character during the course of repeated sexual reproduction.

EXHIBIT B (revised)

Statement of Distinctness

Monsanto Technology Lt.C. believes that I285291 is most similar to corn inbred 01INL1, an inbred developed by DEKALB Genetics Corporation.

1285291 and 01INL1 differ most significantly in the following traits:

Trait	l285291	01INL1
Husk Opening*	Tight	Very Loose
	(9)	(1)

^{*}based on a scale of 1-9; 1 = very loose, 9 = very tight

2002

Variety	Tassel Branch Number
1285291	6.4
	(Std Dev = 2.1, N= 10)
01INL1	12.1
	(Std Dev = 2.1, N= 10)
P_Val	0.000
Signif.	**

2003

Tassel Branch Number
8.0
(Std Dev = 1.4, N=10)
14.6
Std Dev = 1.9 , N=10)
0.000
**

Significance levels are indicated as: + = 10%, * = 5 %, ** = 1%

Corn variety I285291 has a tight ear husk and fewer tassel branches while comparative corn variety 01INL1 has a very loose ear husk and more tassel branches.

EXHIBIT B (revised)

Description of Experimental Design

The corn varieties I285291, 01INL1 and MO17 were grown at the Waterman, IL observation nursery in years 2002-2003. The varieties were planted in 2 row plots with 15 plants per row in each of the three years. Trait data were collected on 10 random representative plants for most traits from each 2 row plot. Data on qualitative traits are usually collected on 10 plants from each 2 row plot. For Exhibit C all data were pooled and reported as means across the years for subject variety and the standard variety with standard deviation. The varieties are randomly planted in a 4.5 acre observation nursery which is located within a larger 18 acre field. Besides the observation nursery, this field consists of a research seed increase nursery and an IP seed inventory nursery. The location of each of these individual nurseries is rotated each year to a different location within the 18 acre field. Therefore subject inbreds are not planted adjacent to comparative or standard varieties and may be located in different areas of the larger field each year, therefore being influenced by spacial differences within the field. Growing conditions within the field are not uniform as there are some slight topographical variations such as lower areas which may accumulate and retain water or higher areas which are usually drier. The field is tiled and therefore a variety maybe planted close to a tile line while a comparative variety maybe planted further away and in a low spot within the field. Temporal varieties can exist as weather conditions from year to year can vary as well as planting dates can vary from year to year based on weather conditions. Weather conditions each year can vary the maturity rate of the varieties due to either favorable or unfavorable growing conditions.

Trait variability is not observed for each variety within its own test plot-plants are usually uniform and data are collected on the "most" representative plants- variability occurs due to spacial location of the test plot for that variety from year to year and to the temporal variation of weather conditions from year to year during the 2-3 years data are collected.

Waterman Research Station Weather Data 2002-2003

Date	Average Precip. (mm)	Ave. Monthly Temp – Max. (F°)	Ave. Monthly Temp-Min (F°)	Ave. Monthly Rel. Humid Max (%)	Ave. Monthly Rel. Humid – Min (%)
June 2002	5.3	81.3	60.4	90.7	47.7
July 2002	1.5	87.0	64.9	93.2	48.3
August 2002	5.7	83.1	61.0	96.0	51.8
Sept. 2002	1.5	79.4	52.6	95.0	42.7
June 2003	2.0	75.7	55.7		_
July 2003	6.4	82.2	62.2	=	-
August 2003	2.6	83.5	63.5		-
Sept 2003	2.6	72.9	52.9	-	-

United States Department of Agriculture, Agricultural Marketing Service Science and Technology, Plant Variety Protection Office National Agricultural Library Building, Room 400 Beltsville, MD 20705-2351

OBJECTIVE DESCRIPTION OF VARIETY CORN (Zea mays L.)

Name of Applicant(s)	OOM (256 me	Variety Seed Source	Variet	y Name or Temporary [Designation	
Monsanto Technology LLC				1285291		
Address (Street & No., or R.F.D. No., City, State, Zip Code and Cour	FOR (OFFICIAL USE	PVPO Number			
'8350 Minnegan Road, Waterman, IL 60556				2001001	> /	
Place the appropriate pumper that describes the valetal should be started as a second started as a second started as a second started as a second started started as a second started started as a second started star						
Place the appropriate number that describes the varietal characters typical of this inbred variety in the spaces below. Right justify whole numbers by adding leading zeroes if necessary. Completeness should be striven for to establish an adequate variety description.						
COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; describe #25 and #26 in Comments section): 01=Light Green 06=Pale Yellow 11=Pink 16=Pale Purple 21=Buff 02=Medium Green 07=Yellow 12=Light Red 17=Purple 22=Tan 03=Dark Green 08=Yellow-Orange 13=Cherry Red 18=Colorless 23=Brown 04=Very Dark Green 09=Salmon 14=Red 19=White 24=Bronze 05=Green-Yellow 10=Pink-Orange 15=Red & White 20=White Capped 25=Variegated (Describe) 26=Other (Describe)						
STANDARD INBRED CHOICES (Use the most similar (in background and maturity) of these to make comparisons based on grow-out trial data): Yellow Dent Families: Yellow Dent (Unrelated): Sweet Corn: Family Family Members C0109, ND246, C13, lowa5125, P39, 2132 B14 CM105, A632, B64, B68 Oh7, T232 B37 B37, B76, H84 W117, W153R Popcorn: B73 N192, A679, B73, NC268 W182BN SG1533, 4722, HP301, HP7211 C103 Mo17, Va102, Va35, A682 White Dent: Pipecorn:						
WF9 W64A, A554, A654, Pa91 1. TYPE: (describe intermediate types in Comments section)	Mo15W, Mo16W, Mo2	4VV				
2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental	2 Type	Standard Inbred Name MO17				
				Standard Seed Source		
2 1=Northwest 2=North central 3=Northeast 4=Southeast 5=South central 6=Southwest 7=Other 2 Region						
MATURITY (In Region Best Adaptability; show Heat Unit formula in DAYS HEAT UNITS 7 5 1 4 2 6.0 From emergence to 50% of plant			DAYS 0 7 9	HEAT UNITS 1 6 8 0.0		
7 2 1 2 6 9. 0 From emergence to 50% of plant:	s in pollen		075	1 5 8 2.0		
From 10% to 90% pollen shed						
From 50% silk to optimum edible	quality					
From 50% silk to harvest at 25% moisture						
4. PLANT:	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	
1 7 8. 2 cm Plant Height (to tassel tip)	22.0	30	1 9 2.7.	18.6	30	
0 6 1. 3 cm Ear Height (to base of top ear node)	5.4	30	0 7 6.8	14.0	30	
1 4. 2 cm Length of Top Ear Internode	1.7	30	0 1 4.4	1.8	30	
Average Number of Tillers		<u></u>				
1.0 Average Number of Ears per Stalk	0.0	30	0 0 1.0	0.0	30	
2 Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=N	2 Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Moderate 4=Dark					
Application Variety Data	Page 1	,	Standard Inbre	d Data		
•					_	

Application Varie	ety Data	Page 2		Standard Inbre	ed Data	
5. LEAF:		Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
0 8.2	cm Width of Ear Node Leaf	0.9	30	0 0 9.0	0.7	30
. 57.9	cm Length of Ear Node Leaf	4.7	30	0 6 2.4	6.4	30
5.0	Number of leaves above top ear	0.8	30	5. 6	0.4	15
2 5. 5	degrees Leaf Angle (measure from 2nd leaf above ear at anthesis	4.6 to stalk above leaf)	30	3 5.8	7.8	30
02	Leaf Color (Munsell code 5 GY 4/8)	0 2 (Munsell	code 5 GY 5/10)			
8	Leaf Sheath Pubescence (Rate on scale from	1=none to 9=like peach fuzz)		2		
3	Marginal Waves (Rate on scale from 1=none	to 9=many)		5		
4	Longitudinal Creases (Rate on scale from 1=	none to 9=many)		8		
6. TASSEL:		Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
0 7. 2	Number of Primary Lateral Branches	1.9	30	7. 1	1.1	30
3 8. 5	Branch Angle from Central Spike	10.9	30	3 4.6	5.2	30
3 3. 5	cm Tassel Length (from top leaf collar to tassel tip)	5.1	30	4 7.4	4.9	30
4.6	Pollen Shed (Rate on scale from 0=male sterile	e to 9=heavy shed)		4.3		
07	Anther Color (Munsell code 2.5 Y 8/10)			0 5 (Munsell o	code 2.5 GY 8/6)	
0 2 Glume Color (Munsell code 5 GY 4/8)				0 2 (Munsell code 5 GY 4/8)		
1	Bar Glumes (Glume Bands): 1=Absent 2=Prese	ent		1		
7a. EAR (Unhusk	xed Data):					
07 Silk	Color (3 days after emergence) (Munsell code	2.5 Y 8/10)		0 5 (Munsell o	code 2.5 GY 8/6)	
0.2 Fres	sh Husk Color (25 days after 50% silking) (Muns	sell code 5 GY 4/8)		0 2 (Munsell o	code 5 GY 4/8)	
2 1 Dry I	Husk Color (65 days after 50% Silking) (Munsel	code 2.5 Y 8/4)		2 1 (Munsell o	code 2.5 Y 8/4)	
1 Posit	tion of Ear at Dry Husk Stage: 1=Upright 2=Hor	izontal 3=Pendent		1		
9 Husk	Tightness (Rate on scale from 1=very loose to	9=very tight)		8		
2 Husk tip) 4=Very	Extension (at harvest): 1=Short (ears exposed Long (>10 cm)) 2=Medium (<8 cm) 3=Long (8	-10 cm beyond ear	3		
7b. EAR (Husked	Ear Data):	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
1 2. 4	cm Ear Length	1.1	30	1 8.5	0.7	30
4 0. 1	mm Ear Diameter at mid-point	1.8	30	3 8.0	1.6	30
9 4.5 g	ım Ear Weight	9.7	30	1 0 4.8	18.0	30
1 4 .4	Number of Kernel Rows	1.3	30	1 2.0	0.7	15
1 1	Kernel Rows: 1=Indistinct 2=Distinct			2		
1 1	Row Alignment: 1=Straight 2=Slightly Curved 3	=Spiral		1		
074	cm Shank Length	2.5	30	0 9.8	1.9	15
2 1	Ear Taper: 1=Slight 2=Average 3=Extreme			2		
Application Variety	Data			Standard Inbred	d Data	****
Note: Use chart on	first page to choose color codes for color traits			····		

1 0 .9 mm Kernel Uright 7 .9 mm Kernel Wright 7 .9 mm Kernel Wright 8 .1 Aleurone Color (Muneel Stape Grade) 1 Aleurone Color (Muneel Code Lighter than 5 V 9r1) 9 Aleurone Color (Muneel Code Lighter than 5 V 9r1) 9 Aleurone Color (Muneel Code Lighter than 5 V 9r1) 9 Than Endosperm Type: 1=Sweet (sur1) 2=Extra Sweet (sur2) 3=Normal Starch 5=VWeys Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 9=High Oil 10+Chiner 10+Chiner 6=High Protein 7=High Lysine 8=Super Sweet (se) 9=High Oil 10+Chiner 10+Chiner 10+Chiner 8=Super Sweet (se) 9=High Oil 10+Chiner 22 2 4 mm Cob Diameter at mid-point 0.8 30 2 2 .1 11 Cob Color (Muneell code 5 R 6/6) 10 DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested; leave Race or Strain Options blank if polygenic). A Leaf Blight, Clarebrothum graminicola) 10 Common Rust (Pucchia sorphi) 11 Common Smut (Valleties away) 12 Common Rust (Valleties away) 13 Cosas Will Clavishacter mayeris) 14 Common Smut (Valleties away) 15 Eyespot (Kabahielia zeae) 16 Northern Leaf Bligh (Clavishacter than susceptible) 17 Anthracosca Leaf Blight (Clavishacter than susceptible) 18 Superot (Kabahielia zeae) 19 Cosas Will (Clavishacter mayeris) 19 Cosas Will (Clavishacter mayeris) 10 Cosas Will (Clavishacter mayeris) 10 Cosas Will (Clavishacter mayeris) 11 Cosas Will (Clavishacter mayeris) 12 Cosas Will (Clavishacter mayeris) 13 Subhern Leaf Bligh (Clavishacter than susceptible) 14 (Common Smut (Valleties on mayeris) 15 Eyespot (Kabahielia zeae) 16 Southern Leaf Bligh (Clavishacter mayeris) 17 Eyespot (Common Smut (Valleties) 18 Sewart SWit (Cravinia organia) 19 Cosas Will (Clavishacter mayeris) 10 Cosas Will (Clavishacter mayeris) 10 Cosas Will (Clavishacter mayeris) 10 Cosas Will (Clavishacter mayeris) 11 Cosas Will (Clavishacter mayeris) 12 Cosas Will (Clavishacter mayeris) 13 Sewart SWit (Clavishacter mayeris) 14 Common Swit (Clavishacter mayeris						····			20060013	<u> </u>
1 0 .9 mm Kernel Length 7, 9 mm Kernel Width 7, 9 mm Kernel Starker 8, 9 mm Kernel Starker 8, 9 mm Kernel Starker 9, 9 mm Kernel Starker 9, 9 mm Kernel Starker 9, 9 mm Kernel St	Standard Inbred Data		Page 3		ata	Page 3				
7.9 mm Kernel Width 0.7 30 0 9.0 5.1 mm Kernel Thickness 0.5 30 0 4.9 5.1 mm Kernel Thickness 0.5 30 0 4.9 3.1.7 1 Aleurone Color Pattern: 1=Hornozygous 2=Segregating (describe) 1 1 Aleurone Color (Munsell code Lighter than 5 Y 9/1) 1 3 Endosperm Color (Munsell code Lighter than 5 Y 9/1) 1 3 Endosperm Type: 1=Sweet (but) 2=Extra Sweet (sh2) 3=Normal Starch 4=High Amylose Starch 6=High Frotain 7=High Lysline 8=Super Sweet (se) 9=High Oil 7 (Munsell code 2: 5 Y 8/10) 1 3 Endosperm Type: 1=Sweet (but) 2=Extra Sweet (sh2) 3=Normal Starch 4=High Amylose Starch 6=High Frotain 7=High Lysline 8=Super Sweet (se) 9=High Oil 7 (Munsell code 2: 5 Y 8/10) 1 3 Endosperm Type: 1=Sweet (but) 2=Extra Sweet (sh2) 3=Normal Starch 6=High Amylose Starch 6=High Frotain 7=High Lysline 8=Super Sweet (se) 9=High Oil 10 Y (Munsell code 2: 5 Y 8/10) 1 9 COB: Standard Deviation Sample Size 9: 7 (Munsell code 5 R 6/6) 1 10 DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested; leave Race or Stend Options blank if podygenic); 1 A Leaf Bilghts, Willis, and Local Infection Diseases 7 Anthracnose Leaf Bilght (Collectrichum graminicole) 1 (Collectrichum graminicole) 1 (Collectrichum graminicole) 2 (Common Rust 10 Y Hermitishopsorum Leaf Bilght (Equivalence michiganense sep. nebraskense) 1 (Common Struct (Lyblings secolus) 1 (Collectrichum graminicole) 2 (Common Rust 10 Y Hermitishopsorum Leaf Bilght (Bilgholens zelocids) 1 (Collectrichum graminicole) 2 (Common Rust 10 Y Hermitishopsorum Leaf Bilght (Bilgholens zelocids) 1 (Collectrichum graminicole) 2 (Common Rust 10 Y Hermitishopsorum Leaf Bilght (Bilgholens zelocids) 1 (Collectrichum graminicole) 2 (Common Rust 2 Stark Rot (Collectrichum graminicole) 2 (Common Rust 3 Stewarts Will (Collectrichum graminicole) 2 (Common Rust 3 Stewarts Will (Collectrichum graminicole) 3 (Common Rust 3 Stewarts Will (Collectrichum graminicole) 3 (Common Rust 3 Stewarts Will (Collectrichum graminicole) 3 (Common Rust 3 Stewarts Will (Collectrichum graminic	n	Sample Size	tandard Deviation	;		Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
5.1 mm Kernel Thickness	1. 4	30	0.5		n Kernel Length	0.5	30	1 1.4	0.4	15
2 2 .8 % Round Kernels (Shape Grade) 1 Aleurone Color Pattern: 1=Homozygous 2=Segregating (describe) 1 9 Aleurone Color (Munsell code Lighter than 6 Y 9/1) 1 9 Aleurone Color (Munsell code Lighter than 6 Y 9/1) 1 9 Aleurone Color (Munsell code 2.5 X 1/0) 3 Endospern Type: 1=Sweet (sur) 2=Extra Sweet (sh2) 3=Normal Starch 4=High Amylose Starch 5=Vivay Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 9=High Oil 19=Cliber 19=Cliber 2 4.2 gm Weight per 100 Kernels (unsized sample) 5 Cost Standard Deviation Sample Size 2 9.7 9 COB: Standard Deviation Sample Size 2 9.7 9 COB: Standard Deviation Sample Size 2 9.7 1 1 Cob Color (Munsell code 5 R 6/6) 10 DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested; leave Race or Strain Options blank if polyganic): A Leaf Blights, Wills, and Local infection Diseases 7 Anthracnose Leaf Blight (Collectrichium graminicole) 6 Common Rust (Picchia) gramycis) 7 Common Smut (Vallago mayolis) 7 Common Smut (Vallago mayolis) 8 Common Rust (Picchia) gramycis) 7 Common Smut (Vallago mayolis) 8 Common Smut (Vallago mayolis) 9 Common Smut (Vallago ma	9. 0	30	0.7		n Kernel Width	0.7	30	0 9.0	0.5	15
1 Aleurone Color Pattern: 1=Homozygous 2=Segregating (describe) 1 9 Aleurone Color (Munsell code Lighter than 5 Y 9/1) 0 7 Hard Endosperm Color (Munsell code 2.5 Y 8/10) 3 Endosperm Type: 1=Sweet (su1) 2=Extra Sweet (sh2) 3=Normal Starch 5=High Amylose Starch 5=Waxy Starch 6=High Protein 7=High Lysine 3=Super Sweet (se) 9=High Oil 10=Other	1. 9	30	0.5		n Kernel Thickness	0.5	30	0 4.9	0.3	15
1 9 Aleurone Color (Munsell code Lighter than 5 Y 9/1) 0 7 Hard Endosperm Color (Munsell code 2.5 Y 8/10) 3 Endosperm Type: 1=Sweet (sur) 2 =Extra Sweet (sh2) 3=Normal Starch 5=Waxy Starch 6=High Protein 7=High Lysine 5=Super Sweet (se) 8=High Oil 0 3 3 3 5=Super Sweet (se) 10=Other 6=High Protein 7=High Lysine 5=Super Sweet (se) 8=High Oil 0 3 3 5=Super Sweet (se) 10=Other 10=O	. 7	500g	4.2		Round Kernels (Shape Grade)	4.2	500g	3 1. 7	3.6	500g
0.7 Hard Endosperm Color (Munsell code 2.5 Y 8/10) 3 Endosperm Type: 1=Sueer (sur1) 2=Extra Sweet (sh2) 3=Normal Starch 5=Way Starch 5=Way Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 5=High Amylose Starch 5=Way Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 5=High Oil 0.3 2 4 .2 gm Weight per 100 Kernels (unsized sample) 5.5 1100 seeds 2 9.7 9. COB: Standard Deviation Sample Size Mean S 2 2.1 1 1 Cob Color (Munsell code 5 R 6/6) 1 4 (Munsell code 5 R 6/6) 1 1 4 4 (Munsell code 5 R 6/6) 1 1 4 4 (Munsell code 5 R 6/6) 1 1 4 4 (Munsell code			describe)	egregating	eurone Color Pattern: 1=Homozygous 2=Se	gating (describe)		1		
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9. COB: Standard Deviation Sample Size Mean S 2 2.4 mm Cob Diameter at mid-point 0.8 30 2 2.1 1 1 Cob Color (Munsell code 5 R 6/6) 1 1 4 (Munsell code 5 R 6/6) 1 1 1 4 (Munsell code 5 R 6/6) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3		3=Normal Starch 4=H =Super Sweet (se)	weet (sh2) ine 8	xy Starch 6=High Protein 7=High Lysine	(sh2) 3=Normal Starch 8=Super Sweet (se)		0 3		
2 2. 4 mm Cob Diameter at mid-point 0.8 30 2 2. 1 1 1 Cob Color (Munsell code 5 R 6/6) 1 1 4 (Munsell	7	1100 seeds	5.5		Veight per 100 Kernels (unsized sample)	5.5	1100 seeds	2 9. 7	8.7	1200 seeds
1 1 Cob Color (Munsell code 5 R 6/6) 10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested; leave Race or Strain Options blank if polygenic); A. Leaf Blights, Wilts, and Local Infection Diseases 7 Anthracnose Leaf Blight (Collectrichum graminicola) 8 Common Rust (Pucclnia sorghi) Common Smut (Uslabace maydis) 6 Eyespot (Kabalielia zeae) 7 Eyespot (Kabalielia zeae) 6 Goss's Wilt (Calvabacter michiganense spp. nebraskense) 7 Eyespot (Rabalielia zeae) 8 Goss's Wilt (Calvabacter michiganense spp. nebraskense) 9 Goss's Wilt (Calvabacter michiganense spp. nebraskense) 10 Goss's Wilt (Calvabacter michiganense spp. nebraskense) 11 Anthracnose Leaf Common Rust 12 Common Smut 13 Common Smut 14 (Sepesity) 15 Gray Leaf Spot (Eapolaris zeicola) 16 Goss's Wilt (Calvabacter michiganense spp. nebraskense) 17 Eyespot 18 Goss's Wilt (Calvabacter michiganense spp. nebraskense) 19 Goss's Wilt (Calvabacter michiganense spp. nebraskense) 10 Goss's Wilt (Calvabacter michiganense spp. nebraskense) 10 Southern Leaf Blight (Ejepolaris maydis) 11 Anthracnose Leaf 12 Common Rust 13 Common Rust 14 (Munsell code 5 15 Common Rust 15 Common Rust 15 Common Rust 16 Common Rust 17 Eyespot 18 Goss's Wilt (Calvabacter michiganense spp. nebraskense) 19 Southern Leaf Blight (Ejepolaris maydis) 10 Southern Leaf Blight (Ejepolaris maydis) 10 Common Stutt 10 Common Rust 12 Common Rust 13 Common Rust 14 (Munsell code in Common Rust 15 Common Rust 16 Common Rust 17 Eyespot 18 Septemble Jesepsot 19 Common Rust 19 Common Rust 10 Common R		Sample Size	tandard Deviation	\$		Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested; leave Race or Strain Options blank if polygenic): A. Leaf Blights, Wilts, and Local Infection Diseases 7. Anthracnose Leaf Blight (Colletotrichum graminicola) 8. Common Rust (Puccinia sorghi) Common Rust (Puccinia sorghi) Common Rust (Puccinia sorghi) Gess's Wilt (Calvibacter michiganense spp. nebraskense) 7. Eyespot (Kabatielia zeae) 7. Eyespot (Rabdisla zeae) 7. Anthracnose Leaf Blight (Calvibacter michiganense spp. nebraskense) 8. Gass's Wilt (Calvibacter michiganense spp. nebraskense) 9. Teyespot (Rabdisla zeae) 9. Teyespot (Saddisla) zeae) 9. Teyespot (Gerospora zeae-maydis) 9. Race 2 9. Southern Rust (Puccinia polygora) 9. Southern Leaf Blight (Experchilum turcicum)	1	30	0.8		Cob Diameter at mid-point	0.8	30	2 2.1	8.0	15
Race of Strain Options blank it polygenic): A. Leaf Bilghts, Wilts, and Local Infection Diseases 7 Anthracnose Leaf Bilght (Colletotrichum graminicola) 8 Common Rust (Puccinia sorghi) Common Smut (Vestilago maydis) 6 Ceyspot (Kabatielia zeae) 7 Gray Leaf Spot (Cernospora zeae-maydis) 7 Helminthosporium Leaf Spot (Espospora zeae-maydis) 7 Helminthosporium Leaf Spot (Espospora zeae-maydis) 8 Northern Leaf Bilght (Espospora zeae-maydis) 8 Northern Leaf Bilght (Espospora zeae-maydis) 9 Northern Leaf Bilght (Espospora zeae-maydis) 1 Race 2 1 Race 2 2 Race 2 3 Northern Leaf Bilght (Espospora zeae-maydis) 8 Southern Leaf Bilght (Espospora zeae-maydis) 9 Southern Leaf Bilght (Espospora zeae-maydis) 1 Southern Leaf Bilght (Espospora zeae-maydis) 9 Southern Leaf Bilght (Espospora zeae-maydis) 1 Southern Leaf Bilght (Espospora zeae-maydis) 1 Southern Leaf Bilght (Espospora zeae-maydis) 2 Gray Leaf Spot (Persopora zeae-maydis) 2 Gray Leaf Spot (Persopora zeae-maydis) 2 Southern Leaf Bilght (Espospora zeae-maydis) 3 Southern Leaf Bilght (Espospora zeae-maydis) 3 Southern Leaf Bilght (Espospora zeae) 4 Northern Leaf Bilght (Espospora zeae) 5 Northern Leaf Bilg	(Munsell co				b Color (Munsell code 5 R 6/6)			1 4 (Munsell co	de 5 R 3/8)	
Maize Chlorotic Mottle Virus (MCMV) Maize Dwarf Mosaic Virus (MDMV) Sorghum Downy Mildew of Corn (Peronosclerospora sorghi) Other (Specify) C. Stalk Rots Anthracnose Stalk Rot (Colletotrichum graminicola) Diplodia Stalk Rot (Stenocarpella maydis) Fusarium Stalk Rot (Gibberella zeae) Other (Specify) D. Ear and Kernel Rot Aspergillus Ear and Kernel Rot (Aspergillus flavus) Diplodia Ear Rot (Gibberella zeae) Gibberella Ear Rot (Gibberella zeae) Other (Specify) D. Ear and Kernel Rot (Fusarium moniliforme) Gibberella Ear Rot (Gibberella zeae) Other (Specify) D. Ear and Kernel Rot (Aspergillus flavus) Diplodia Ear Rot (Gibberella zeae) Gibberella Ear Rot (Gibberella zeae) Other (Specify)	Common Ru Common Sm Eyespot Goss's Wilt Gray Leaf Sp Helminthospi Northern Lea Southern Rus Stewart's Wil Other (Specif		ace 2	R	Blight (Colletotrichum graminicola) uccinia sorghi) Istilago maydis) Ia zeae) Ia zeae) Ia zeaen Ia zeae-maydis) Ia zeae-maydis) Ia Leaf Spot (Bipolaris zeicola)	Race 2		Common Rus Common Sm Fyespot Goss's Wilt Gray Leaf Sp Helminthospo Northern Lea Southern Lea Southern Rus Cother (Specification) Corn Lethal N	ot orium Leaf Spot f Blight f Blight t t	Race 2 Race O
- n n 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Maize Chloro Maize Chlorit Maize Chlorit Maize Dwarf Sorghum Dox Other (Specif Anthracnose Diplodia Stall Fusarium Sta Gibberella St Other (Specif Aspergillus E Diplodia Ear I Fusarium Ear Gibberella Ea Other (Specif				ottle Virus (MCMV) iic Virus (MDMV). iid Virus (MDMV). filidew of Corn (Peronosclerospora sorghi) Rot (Colletotrichum graminicola) (Stenocarpella maydis) It (Fusarium moniliforme) It (Gibberella zeae) Its It Kernel Rot (Aspergillus flavus) Itterocarpella maydis) Kernel Rot (Fusarium moniliforme) (Gibberella zeae)			Maize Chloro Maize Chlorit Maize Dwarf Sorghum Dov Other (Specif Anthracnose Diplodia Stalk Fusarium Sta Gibberella Sta Other (Specif Aspergillus Ear Fisarium Ear Gibberella Ea Other (Specif	c Mottle Virus Mosaic Virus Virus Mildew of Corn V) Stalk Rot Rot Ik Rot	
Application Variety Data Standard Inbred Data	dard Inbred D		tot alle the		a			Standard Inbred D	ata	

200600131

11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested): Banks Grass Mite (Oligonychus pratensis) Corn Earworm (Helicoverpa zea) Leaf-Feeding Silk Feeding: Ear Damage Corn Leaf Aphid (Rhopalosiphum maidis) Corn Sap Beetle (Carpophilus dimidiatus) Standard Deviation Sample S Corn Earworm Leaf Feeding Ear Damage Corn Leaf Aphid Corn Sap Beetle	iize
Banks Grass Mite (Oligonychus pratensis) Corn Earworm (Helicoverpa zea) Leaf-Feeding Silk Feeding: Ear Damage Corn Leaf Aphid (Rhopalosiphum maidis) Corn Sap Beetle (Corpositive dividicity) Banks Grass Mite Corn Earworm Leaf Feeding Ear Damage Corn Leaf Aphid (Corpositive dividicity)	
Leaf-Feeding Silk Feeding: Ear Damage Corn Leaf Aphid (Rhopalosiphum maidis) Corn Sap Reetle (Corpositive dividies as) Corn Leaf Aphid	
Corn Leaf Aphid (Rhopalosiphum maidis) Corn Sap Reatle (Corpositive direction) Corn Leaf Aphid	
contral pressure	
European Corn Borer (Ostrinia nubilalis) 1st Generation (Typically Whorl Leaf Feeding) 2nd Generation (Typically Leaf Sheath-Collar Feeding) 2nd Generation (Typically Leaf Sheath-Collar Feeding) 2nd Generation	
Fall Armyworm (Spodoptera frugiperda) Leaf-Feeding Silk-Feeding: mg larval wt. Fall Armyworm Leaf Feeding	
Maize Weevil (Sitophilus zeamaize) Maize Weevil Maize Weevil Northern Rootworm (Diabrotica barberi) Southern Rootworm (Diabrotica undecimpunctate) Southern Rootworm Southern Rootworm	
Southwestern Corn Borer (Dietraea grandiosella) Leaf Feeding Stalk Tunneling: cm tunneled/plant Southwestern Corn Borer Leaf Feeding	
Two-spotted Spider Mite (Tetranychus urticae) Western Rootworm (Diabrotica virgifera virgifera) Other (Specify) Two-spotted Spider Mite Western Rootworm Other (Specify)	
12. AGRONOMIC TRAITS:	—
6 Stay Green (at 65 days after anthesis) (Rate on a scale from 1=worst to 9=excellent.) 2 Stay Green	
0 0.0 % Dropped Ears (at 65 days after anthesis) 0 0.0 % Dropped ears	
0 0 .0 % Pre-anthesis Brittle Snapping	
0 0.0 % Pre-anthesis Root Lodging	
0 0. 0 % Post-anthesis Root Lodging (at 65 days after anthesis) 0 0 . 0 % Post-anthesis Root Lodging	
Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)	
13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but not supplied; 2=data supplied)	
1 Isozymes 0 RFLP's 0 RAPD'sOther (Specify)	
REFERENCES:	
Butter, D.R. 1954. A System for the Classification of Corn Inbred Lines. PhD Thesis, Ohio State University. Emerson, R.A., G.W. Beadle, and A.C. Fraser. 1935. A Summary of Linkage Studies in Maize. Cornell A.E.S., Mem. 180. Farr, D.F., G.F. Bills, G.P. Chamuris, A.Y. Rossman. 1989. Fungi on Plant and Plant Products in the United States. The American Phytopathological Society, St. Paul, MN. Inglett, G.E. (Ed.) 1970. Corn: Culture, Processing, Products. Avi Publishing Company, Westport, C.T. Jugenheimer, R.W. 1976. Corn: Improvement, Seed Production, and Uses. John Wiley & Sons, New York. McGee, D.C. 1988. Maize Diseases. APS Press, St. Paul, MN. 150 pp. Munsell Color Chart for Plant Tissues. Macbeth. P.O. Box 230. Newburgh, N.Y. 12551-0230 The Mutants of Maize. 1968. Crop Science Society of America. Madison, WI. Shurtleff, M.C. 1980. Compendium of Corn Diseases. APS Press, St. Paul, MN. 105 pp. Sprague, G.F., and J.W. Dudley (Editors). 1988. Corn and Corn Improvement, Third Edition. Agronomy Monograph 18. ASA, CSSA, SSSA, Madison, WI. Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S., Bul. 831. 1959. U.S. Department of Agriculture. 1936, 1937. Yearbook.	
COMMENTS (e.g. state how heat units were calculated, standard inbred seed source, and/or where data was collected. Continue in Exhibit D):	
Heat Unit Calculation: GDU = <u>Daily Max Temp (<=86°F) + Daily Min Temp (>=50°F)</u> - 50°F	
Supplemental data obtained from 2005 seed inventory and production parent test.	

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EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	confidential until the certificate is issu	ued (7 U.S.C. 2426).
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Monsanto Technology L.L.C. LLC		1285291
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
800 N. Lindbergh Blvd.	(815) 758-9281	(815) 758-3117
Creve Couer, MO 63167	7. PVPO NUMBER	
U.S.A.		200600131
8. Does the applicant own all rights to the variety? Mark an "X" in the	ne appropriate block. If no, please expla	in. X YES NO
9. Is the applicant (individual or company) a U.S. national or a U.S. b	pased company? If no, give name of co	ountry. YES NO
10. Is the applicant the original owner?	NO If no, please answer one	of the following:
		v-
a. If the original rights to variety were owned by individual(s), is ((are) the original owner(s) a U.S. Nationa NO If no, give name of countr	
·		
b. If the original rights to variety were owned by a company(ies),	is (are) the original owner(s) a U.S. base NO If no, give name of country	·
11. Additional explanation on ownership (Trace ownership from origin	nal breeder to current owner. Use the re	verse for extra space if needed):
		•
Corn Variety I285291 was originated and Technology Example By agreement betwee rights to any invention, discovery or development of the control of the contr	n Monsanto Technology L.E.C. a opment are assigned to Monsan	and the breeder, all to Technology L.L.C. ∠∠C
PLEASE NOTE:	· ·	
Plant variety protection can only be afforded to the owners (not licens	ees) who meet the following criteria:	
 If the rights to the variety are owned by the original breeder, that penaltional of a country which affords similar protection to nationals of 	erson must be a U.S. national, national of the U.S. for the same genus and specie	f a UPOV member country, or ss.
If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a c genus and species.	red the original breeder(s), the company ountry which affords similar protection to	must be U.S. based, owned by particular of the U.S. for the same
3. If the applicant is an owner who is not the original owner, both the o	original owner and the applicant must me	eet one of the above criteria.
The original breeder/owner may be the individual or company who direct for definitions.	ected the final breeding. See Section 47	I(a)(2) of the Plant Variety Protection
According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, a control number. The valid OMB control number for this information collection is 0581-0055, including the time for reviewing the instructions, searching existing data sources, gathering at	The time required to complete this information collecti	on is estimated to average 0.1 hour per response.

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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY **PLANT VARIETY PROTECTION OFFICE** BELTSVILLE, MD 20705

EXHIBIT F

	DECLARATION REGARDING DEPOSIT	
NAME OF OWNER (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	TEMPORARY OR EXPERIMENTAL DESIGNATION
Monsanto Technology LLC	8350 Minnegan Road	
:	Waterman, IL 60556 U.S.A.	VARIETY NAME 1285291
NAME OF OWNER REPRESENTATIVE (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	FOR OFFICIAL DISE DAILY TO THE HEALTH AND THE STATE OF TH
Timothy R. Kain	8350 Minnegan Road Waterman, IL 60556	PVPO NUMBER
	U.S.A.	200600131

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

28 FEB 2008 Date